

- synthesis means configured to use the information associated with the predetermined set of speech elements to synthesize parts of the recognized speech elements corresponding to the corrupted parts, and
- replacement means for replacing said corrupted parts by synthesized parts in the received data frames.
- 2. (Amended) A receiver as claimed in claim 1, wherein said speech elements are phonemes or diphones.



5. (Amended) An error correction device for correcting transmission errors in received digital data frames, comprising:

- storage means for storing information associated with a predetermined set of speech elements that are suitable for reconstituting words of a vocal language,
- vocal recognition means configured to use the information associated with the
  predetermined set of speech elements to recognize corresponding speech elements in
  the received data frames,
- detecting means for detecting corrupted parts in the recognized speech elements,
- synthesis means configured to use the information associated with the predetermined set of speech elements to synthesize parts of the recognized speech elements corresponding to the corrupted parts, and
- replacement means for replacing said corrupted parts by the synthesized parts in the received data frames.
- 6. (Amended) A communication system for transmitting data frames between a transmitter and a receiver via a communication channel, the receiver comprising an error detection device for correcting transmission errors in the received data, wherein said error correction device comprises:
  - storage means for storing information associated with a predetermined set of speech elements that are suitable for reconstituting words of a vocal language,



- vocal recognition means configured to use the information associated with the predetermined set of speech elements to recognize corresponding speech elements in the received data frames,
- detecting means for detecting corrupted parts in the recognized speech elements,
- synthesis means configured to use the information associated with the predetermined set of speech elements to synthesize parts of the recognized speech elements corresponding to the corrupted parts, and
- replacement means for replacing said corrupted parts by the synthesized parts in the received data frames.
- 7. (Amended) An error detection method for correcting transmission errors in received digital data frames, comprising the following steps:
  - a storage step for storing information associated with a predetermined set of speech elements that are suitable for reconstituting words of a vocal language
  - a vocal recognition step for using the information associated with the predetermined set of speech elements to permanently recognize corresponding speech elements in the received data frames,
  - a detection step for detecting corrupted parts in the received speech elements,
  - a synthesis step for using the information associated with the predetermined set of speech elements to synthesize parts of the recognized speech elements corresponding to the corrupted parts, and
  - a replacement step for replacing said corrupted parts by the synthesized parts in the data frame.

